

F-8139

Identifier: Makoto KOUMO, et al.

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. (Cancelled)

2. (Currently Amended) A control system for continuous rubber molding apparatus as claimed in claim[[1]]4 further comprising:

5 a temperature sensor for sensing a temperature in the gear pump;
temperature comparator for comparing a sensed temperature with a set value; and
temperature controller for controlling the temperature in said gear pump based on a comparison result given by the temperature comparator.

10 3. (Currently Amended) A control system for continuous rubber molding apparatus as claimed in claim[[1]]4 or 2, wherein a ratio (L/D) between the length L and the outside diameter D of the screw of said extruder and is in the range of 1 to 8, as inclusive.

4. (New) A control system for controlling a continuous rubber molding apparatus continuously extruding a rubber ribbon to be used for building a tire, the control system comprising:

F-8139

Identifier: Makoto KOUMO, et al.

a first continuous rubber-extruding machine and a second continuous rubber-extruding machine,

5 said first continuous rubber-extruding machine having a first extruder, a strainer placed at a forward position, and a first forming nozzle placed at a further forward position,

said first extruder having a barrel, a screw placed therein and a feed port,

said second continuous rubber-extruding machine having a second extruder, a gear pump placed at a forward position and a second forming nozzle placed at a further forward position,

10 said second extruder having a barrel, a screw placed therein and a feed port,

wherein a rubber material formed into a sheet form by a previous step of blending the rubber material is now fed through the feed port of said first extruder and is fed forwardly while being kneaded by rotation of said screw, and passes said strainer whereby foreign substances or particles are removed, and is outputted from
15 said first forming nozzle in a form of a first rubber ribbon having a cross-section corresponding to the shape of said first forming nozzle,

said first rubber ribbon is fed through said feed port of said second continuous rubber-extruding machine, and is fed forwardly while being kneaded by rotation of said screw, and passes said gear pump, and is outputted continuously by said gear
20 pump driven as rotated through said second forming nozzle in a form of a second

F-8139

Identifier: Makoto KOUMO, et al.

rubber ribbon with a cross-sectional shape corresponding to the shape of said second forming nozzle,

said second rubber ribbon being used for building a tire,

said control system further having:

5 a pressure sensor for sensing a pressure in the gear pump;

pressure comparator for comparing a sensed pressure and a set value; and

motor controller for controlling the number of revolutions of a motor based on a comparison result given by the pressure comparator, the motor being operative to drive a screw of said extruder.